What is claimed is:

1. A method of protecting a patient from embolization during a percutaneous procedure at a treatment site within a vessel comprising:

introducing a first elongate member into the vessel at a vessel access location, the first elongate member having an expandable embolic protection device carried on a distal portion thereof;

introducing a second elongate member into the vessel at the vessel access location, the second elongate member having an expandable treatment device carried on a distal portion thereof;

advancing the first elongate member through the vessel to position the expandable embolic protection device at a desired location;

advancing the second elongate member through the vessel to position the expandable treatment device within the treatment site;

expanding the expandable embolic protection device within the vessel at the desired location;

expanding the vessel at the treatment site by expanding the expandable treatment device, embolic particles released from the treatment site during expansion of the vessel being prevented from flowing distally through the vessel by the expanded embolic protection device.

2. The method of claim 1 wherein the first elongate member is introduced into the vessel separately from the second elongate member.

3. The method of claim 1 wherein the first elongate member is advanced through the vessel independently of the second elongate member.

4. The method of claim 1 wherein the second elongate member includes a lumen sized to slideably accommodate the first elongate member and

wherein the second elongate member is advanced through the vessel to the treatment site over the first elongate member.

5. A method of protecting a patient from embolization during a percutaneous procedure on a vessel, comprising:

providing a guidewire having proximal and distal ends, a proximal and a distal region, an expandable filter associated with the distal region, and a removable sheath which covers the expandable filter and is slidable over the guidewire;

providing a catheter having a treatment device associated with a distal region of the catheter;

introducing the distal end of the guidewire into the patient's vessel with the sheath covering the expandable filter, and positioning the filter downstream of a treatment site, wherein the sheath and guidewire cross the treatment site;

sliding the sheath toward the proximal end of the guidewire and removing the sheath from the vessel, wherein the expandable filter is uncovered;

deploying the filter;

advancing the catheter over the guidewire to position the treatment device at the treatment site; and

expanding the vessel at the treatment site with the treatment device, wherein embolic material is generated and captured before the expandable filter is removed from the patient's vessel.

6. The method of claim 5 wherein the expandable filter includes a filter mesh.

7. The method of claim 5 wherein the filter is deployed before the catheter is advanced over the guidewire.

8. The method of claim 5 wherein the filter is deployed after the catheter is advanced over the guidewire.

9. The method of claim 5 wherein the filter is deployed before the vessel is expanded.

10. The method of claim 8 wherein the filter is deployed before the vessel is expanded.

11. The method of claim 5 wherein the filter is self-expanding and the step of deploying the filter comprises sliding the sheath proximally to uncover the filter.

12. A percutaneous system for treating a vessel at a region of stenosis and filtering emboli comprising:

a guidewire having proximal and distal ends, a proximal and distal region, and an expandable filter associated with the distal region;

a sheath which is shaped to receive the guidewire and retain the filter in a contracted condition, and to slidably release the filter to an expanded condition when the sheath moves toward the proximal end of the guidewire;

a catheter having a proximal and a distal end, a proximal and a distal region, and a lumen which slidably receives the guidewire, the catheter having a treatment device associated with the distal region; and

wherein, during use, the guidewire is positioned across the region of stenosis within the vessel, the filter is expanded, the vessel is expanded within the region of stenosis with the treatment device and wherein embolic material is generated and captured before the expandable filter is removed from the vessel.

13. The system of claim 12 wherein the filter is self-expanding.

14. The system of claim 12 wherein the filter comprises nitinol material.

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